

PTO/SB/08A (10-07)

Approved for use through 10/31/2007. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/578,739
Filing Date	05-10-2006
First Named Inventor	Tiernan
Art Unit	2461
Examiner Name	Brandon Renner
Attorney Docket Number	LJN09001USU

Sheet 1 of 5

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/B.R./	1	US-10/578,739	03-01-2007	Tiernan	
	2	US-11/536,894	09-06-2007	Tian	
	3	US-2002/0061024 A1	05-23-2002	Malkemes et al.	
	4	US-2002/0075875 A1	06-20-2002	Dravida et al.	
	5	US-2002/0080816 A1	06-27-2002	Spinar et al.	
	6	US-2002/0147833 A1	10-10-2002	Richardson et al.	
	7	US-2003/0007508 A1	01-09-2003	Sala et al.	
	8	US-2003/0143946 A1	07-31-2003	Grzeczowski	
	9	US-2004/0218609 A1	11-04-2004	Foster et al.	
	10	US-2007/0047586 A1	03-01-2007	Tiernan	
	11	US-5,012,469	04-30-1991	Sardana	
	12	US-5,278,833	01-11-1994	Crisler et al.	
	13	US-5,390,181	02-14-1995	Campbell et al.	
	14	US-5,572,517	11-05-1996	Safadi	
	15	US-5,590,131	12-31-1996	Kabatepe	
	16	US-5,729,825	03-17-1998	Kostreski et al.	
	17	US-5,867,485	02-02-1999	Chambers et al.	
	18	US-5,936,949	08-10-1999	Pasternak et al.	
	19	US-5,940,738	08-17-1999	Rao	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	1	SG 666666336	03-31-2009	Tiernan et al.		
	2	WO 2006/1299	10-02-2006	Tiernan et al.		
	3	JP 0650565	05-08-2007	Tiernan et al.		
	4	AU 20052002070	10-20-2005	Tiernan et al.		
	5	AU 53508/86	11-07-1996	Campbell et al.		
	6	AU 71104/98	11-11-1998	Fag		

Examiner
Signature

/Brandon Renner/

Date
Considered

05/19/2010

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 801.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08A (10-07)

Approved for use through 10/31/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 2 of 5

Complete if Known

Application Number	10/578,739
Filing Date	05-10-2006
First Named Inventor	Tieman
Art Unit	2405-2461
Examiner Name	Clinton, Jessica - Brandon Renner
Attorney Docket Number	LJN09001USU

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.†	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code² (if known)			
/B R / ↓					

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T*
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)					
	7	BR	P10509010-5	08-07-2007	Tieman et al.		
	8	CA	2285965	10-22-1998	Eng		
	9	CA	2560677	10-20-2005	Tieman et al.		
	10	CN	101027875-A	08-29-2007	Tieman et al.		
	11	CN	1272981	11-08-2000	Eng		
	12	HK	1111558-A	08-08-2008	Tieman et al.		

Examiner Signature	/Brandon Renner/	Date Considered	05/19/2010
--------------------	------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08A (10-07)

Approved for use through 10/31/2007. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	3	of	5
-------	---	----	---

Complete if Known

Application Number	10/578,739
--------------------	------------

Filing Date	05-10-2006
-------------	------------

First Named Inventor	Tiernan
----------------------	---------

Art Unit	2465-2461
----------	-----------

Examiner Name	Clifton, Jessica L-Brandon Renner
---------------	-----------------------------------

Attorney Docket Number	LJN09001USU
------------------------	-------------

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear
		Country Code ¹ Number ¹ Kind Code ² (if known)	MM-DD-YYYY		
	13	EP 05730882-7	01-03-2007	Thermon et al.	
	14	EP 0985275	03-15-2000	Eng	
	15	EP 1736432A1	01-09-2007	Thermon et al.	
	16	EP 1736432A4	09-10-2008	Thermon et al.	
	17	JP 2007/591416 T2	11-04-2007	Thermon et al.	
	18	WO 01/95589 A2	03-28-2002	Richardson et al.	

**Examiner
Signature**

/Brandon Renner/

Date	Considered
10/1/80	10/1/80
10/2/80	10/2/80
10/3/80	10/3/80
10/4/80	10/4/80
10/5/80	10/5/80
10/6/80	10/6/80
10/7/80	10/7/80
10/8/80	10/8/80
10/9/80	10/9/80
10/10/80	10/10/80
10/11/80	10/11/80
10/12/80	10/12/80
10/13/80	10/13/80
10/14/80	10/14/80
10/15/80	10/15/80
10/16/80	10/16/80
10/17/80	10/17/80
10/18/80	10/18/80
10/19/80	10/19/80
10/20/80	10/20/80
10/21/80	10/21/80
10/22/80	10/22/80
10/23/80	10/23/80
10/24/80	10/24/80
10/25/80	10/25/80
10/26/80	10/26/80
10/27/80	10/27/80
10/28/80	10/28/80
10/29/80	10/29/80
10/30/80	10/30/80
10/31/80	10/31/80

05/19/2010

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *Applicant's unique citation designation number (optional). *See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. *Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.18 if possible. *Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08A (10-07)

Approved for use through 10/31/2007. OMB 0851-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1985, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 4 of 5

Complete if Known

Application Number	10/578,739
Filing Date	05-10-2006
First Named Inventor	Tiernan
Art Unit	2461
Examiner Name	Cifton, Jessica L. Brandon
Attorney Docket Number	LJN09001USU Benner

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear
		Country Code ¹ Number ² Kind Code ³ (if known)			
	19	WO 03/039197 A1	10-20-2003	Tierman et al.	
	20	WO 96/033590	10-24-1996	Campbell et al.	
	21	WO 88/47235	12-22-1988	Eng	
	22	KA 20060127257	12-14-2006	Tierman et al.	
	23	WO 99/31871 A	05-24-1999	Attwater et al.	
	24	WO 99/30242 A	08-17-1999	Gelman et al.	

Examiner Signature	/Brandon Benner/	Date Considered	05/19/2010
-----------------------	------------------	--------------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ^aApplicant's unique citation designation number (optional). ^bSee Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP §01.04. ^cEnter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ^dFor Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ^eKind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ^fApplicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-788-9199) and select option 2.

PTO/SB/08A (10-07)

Approved for use through 10/31/2007, OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
is a collection of information unless it contains a valid OMB control number.

~~Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.~~

Substitute for form 144B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	5	of	5
-------	---	----	---

Complete if Known

Application Number	10/578,739
Filing Date	05-10-2006
First Named Inventor	Tiernan
Art Unit	2405 2461
Examiner Name	William, Jessica L Brandon Renner
Attorney Docket Number	LJN09001USU

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ²
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
	25	EP 1049843	10-04-2000	Ammer et al.		
	26	AU 1021399 A	08-26-1999	Gelman et al.		
	27	EP 1049980 A1	11-08-2000	Gelman et al.		
	28	PW 405318 B	09-11-2000	Gelman et al.		
	29	CL 0666-2006	09-09-2006	Niemann et al.		

Examiner Signature	/Brandon Renner/
-----------------------	------------------

Date Considered	05/19/2010
-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *Applicant's unique citation designation number (optional). *See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. *Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). *For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. *Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08B (01-08)

Approved for use through 01/31/2008. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/578,739
Filing Date	05-10-2006
First Named Inventor	Tieman
Art Unit	2465 2461
Examiner Name	Cifton, Jessica L Brandon Renner
Attorney Docket Number	LJN09001USU

Sheet 1

of 1

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
/B.R./	1	DAIL, JAMES E ET AL.: "Adaptive Digital Access Protocol: A MAC Protocol for Multiservice Broadband Access Networks" Communications Magazine, IEEE, IEEE Service Center, Piscataway, US, vol. 34, issue 3, March 1996, pages 104-112, ISSN: 0163-6804	
/B.R./	2	Nortel: Solutions: Long Term Evolution: Solution Literature: White Papers. Long-Term Evolution (LTE): The vision beyond 3G [online]. (July 28, 2008) [retrieved 01-12-2010]. Retrieved from the Internet: <URL: http://www.nortel.com/solutions/wireless/collateral/nn114882.pdf >.	

Examiner
Signature

/Brandon Renner/

Date
Considered

05/19/2010

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 36 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.